

PERSONAL DATA

Alison H. Harrill (Professional)

Alison Hege Harrill (Full Legal Name)

Date of birth: 12/16/1980

CURRENT AFFILIATION

Geneticist

Division of the National Toxicology Program (NTP)

National Institute of Environmental Health Sciences

National Institutes of Health

CONTACT INFORMATION

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Research Triangle Park, NC 27709

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ResearcherID Citation Metrics: [V-7697-2018](#)

EDUCATION

1998 - 2002

Cedar Crest College

Bachelor of Science (Genetic Engineering)

2004 - 2008

The University of North Carolina at Chapel Hill

Doctor of Philosophy (Toxicology)

Mentors: Ivan Rusyn, M.D. Ph.D., David Threadgill
Ph.D.

POSTDOCTORAL TRAINING

2009 - 2010

The Hamner Institutes for Health Sciences

Institute for Drug Safety Sciences

Mentor: Paul B. Watkins, M.D.

ACADEMIC AFFILIATIONS

2012 - present

Adjunct Assistant Professor, Department of
Pharmacology and Experimental Therapeutics,
University of North Carolina at Chapel Hill

2013 - 2016

Assistant Professor (tenure track), Department of
Environmental and Occupational Health, University of
Arkansas for Medical Sciences

2013 - 2016

Assistant Professor (secondary), Department of
Pharmacology and Toxicology, University of Arkansas
for Medical Sciences

2014 - 2016

Member, Systems Pharmacology and Toxicology
Training Grant Faculty

2014 - present

Member, The Graduate School, University of Arkansas
for Medical Sciences

SCIENTIFIC HONORS/AWARDS

2003 - 2004

Oak Ridge Institute for Science and Education
(ORISE) postgraduate research fellowship

2004

Commander's Award of Excellence, U.S. Army
Medical Research Institute for Chemical Defense
(Commander: Col. Gennady Platoff)

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| 2004 | Student Poster Award, Toxicogenomics Research Consortium Annual Meeting |
| 2005 | Society of Toxicology: Toxicologic and Exploratory Pathology Specialty Section Travel Award |
| 2005 | First Place, Student Poster Award, Toxicogenomics Research Consortium Annual Meeting |
| 2007 - 2008 | Science to Achieve Results (STAR) Predoctoral Fellowship, U.S. Environmental Protection Agency |
| 2007 | Society of Toxicology: Risk Assessment Specialty Section Best Student Abstract Award |
| 2007 & 2008 | Leon Goldberg Toxicology Travel Award, University of North Carolina at Chapel Hill |
| 2008 | North Carolina Society of Toxicology Student Award, First Place |
| 2009 | Society of Toxicology: Outstanding Published Paper Advancing the Science of Risk Assessment, Risk Assessment Specialty Section |
| 2011 | Triangle Business Journal "Beautiful Minds" Competition Winner |
| 2013 | Society of Toxicology: John Doull Risk Assessment Abstract Mentor Award (Mentee: Rachel Church) |
| 2013 | Society of Toxicology: Mentor Award, Perry Gehrig Postdoctoral Fellow Mentoring, Risk Assessment Specialty Section (Mentee: Merrie Mosedale) |
| 2013 | Society of Toxicology: Top 10 Abstract, Risk Assessment Specialty Section |
| 2013 - 2016 | Burroughs Wellcome Fund Innovation in Regulatory Science Award |
| 2014 | Society of Toxicology: Mentor Award, Perry Gehrig Postdoctoral Fellow Mentoring, Risk Assessment Specialty Section (Mentee: Rachel Church) |
| 2014 | Society of Toxicology: Best Paper, Molecular and Systems Biology Specialty Section |
| 2016 | Society of Toxicology: Board of Publications Best Paper Published in <i>Toxicological Sciences</i> |
| 2018 | Society of Toxicology: Mentor Award, Molecular and Systems Biology Specialty Section (Mentee: Julia Tobacyk) |

SCIENTIFIC ACTIVITIES

Journal Editor

2017 - present

Toxicological Sciences (*Associate Editor*)

Society Memberships (and Leadership Roles)

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| 2005 - present | Society of Toxicology <ol style="list-style-type: none"> <i>Chair (2017 – 2019) and Appointed Member (2014-present)</i>, Contemporary Concepts in Toxicology Committee <i>Counselor (2014 - 2016)</i>, Molecular and Systems Biology Specialty Section <i>Secretary (2009 – 2011)</i>, Postdoctoral Assembly <i>Chair (2007 – 2008)</i>, Specialty Section Graduate Student Committee <i>Secretary-Treasurer (2007 – 2008)</i>, Student Advisory Council <i>Student Representative (2005 – 2007)</i>, Toxicologic and Exploratory Pathology Specialty Section |
| 2009 - present | Health and Environmental Sciences Institute (HESI) <ol style="list-style-type: none"> <i>Co-Chair (2015 – present) and steering team member (2009 – present)</i>, Emerging Systems Toxicology for Assessment of Risk Committee (formerly called the Genomics Committee) <i>Co-Chair (2017 – 2018) and contributor (2010 - present)</i>, miRNA Biomarkers Working Group <i>Chair (2009 - 2011)</i>, Mouse Models of the Human Population Working Group <i>Contributor (2011 – present) and Project Lead (2011 – 2016)</i>, Biomarkers of Nephrotoxicity Committee <i>Co-Chair Toxicogenomics for Cancer Risk Assessment Committee</i> |
| 2010 - 2013 | <i>Member</i> , Predictive Safety Testing Consortium Hepatic Working Group |
| 2012 - present | Genetics Society of America |
| 2012 - present | American College of Toxicology |
| 2014 - present | The Toxicology Forum <ol style="list-style-type: none"> <i>Member (2017)</i>, Summer Program Committee |
| 2016 - present | <i>Secretary-Elect (2015-2016), Secretary (2016-2017), and Communications Officer (2017-2019)</i> , Toxicology Division of the American Society for Experimental Pharmacology and Therapeutics (ASPET) |

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| 2017 - present | <i>Counselor and Social Committee Member</i> , Genetics and Environmental Mutagenesis Society |
| <i>Conference Chairmanship</i> | |
| 2014 – 2016 | <i>Chair</i> , miRNA Biomarkers for Toxicology CCT Workshop; New Orleans, LA |
| 2016 – 2017 | <i>Co-Chair</i> , Workshop on Advances and Roadblocks for Use of Genomics Data in Cancer Risk Assessment for Drugs and Chemicals; Montreal, Canada |
| <i>Conference Organizing Committees</i> | |
| 2014 - 2015 | FutureTox III: Transforming 21 st Century Science into Risk Assessment and Regulatory Decision-Making; Arlington, VA |
| 2017 - 2018 | Toxicological Concerns in Older Adults: A Neglected Majority; San Antonio, TX |
| 2017 - 2018 | Building a Better Epithelium; San Antonio, TX |
| 2018 - 2019 | Gordon Research Conference on Drug Metabolism; Holderness, NH |
| 2019 - present | Integrating Biology into <i>In Silico</i> Methodologies: Modern approaches for incorporating AOPs into cheminformatic models |
| <i>Manuscript Review</i> | |
| 2013 - present | Archives of Toxicology, Basic and Clinical Pharmacology and Toxicology, Chemical Research in Toxicology, Clinical Pharmacology & Therapeutics, Clinical Toxicology, Drug and Chemical Toxicology, Environmental Health Perspectives, Experimental Biology and Medicine, Food and Chemical Toxicology, G3: Genes Genomes Genetics, Genome Research, ILSI/HESI, Journal of Pharmacology and Experimental Therapeutics, Pharmacogenomics and Personalized Medicine, PLoS Genetics, PLoS One, Scientific Reports, Toxicology, Toxicology and Applied Pharmacology, Toxicological Sciences, Toxicology, Toxicology In Vitro |
| <i>Book Chapter Review</i> | |
| 2018 | Toxicoepigenetics: Core Principles and Applications (Elsevier; Eds: Dana Dolinoy & Shaun McCullough) |
| <i>Grant and Peer Review</i> | |
| 2011 - 2013 | Grant reviewer, Research Triangle International Regional Comprehensive Metabolomics Resource Core Facility |

External Advisory Service

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| 2015 - 2016 | Appointee to US Food and Drug Administration Advisory Board for Pharmaceutical Science and Clinical Pharmacology |
| 2017 – present | OECD Expert group on developmental neurotoxicity |

Institutional and Departmental Service

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| 2011 - 2013 | 401k Committee, The Hamner Institutes for Health Sciences |
| 2011 - 2013 | Health and Safety Advisory Committee, The Hamner Institutes for Health Sciences |
| 2014 - 2016 | Library Committee, University of Arkansas for Medical Sciences |
| 2016 - 2019 | NIEHS DNTP: 5 Day Toxicogenomics Study Reporting Committee |
| 2016 - present | NIEHS DNTP: Toxicogenomics Faculty, Co-Chair (2019) |
| 2016 - present | NIEHS: Predictive Toxicology & Disease Faculty |
| 2016 - present | Tox21 Consortium, Member (2016 – present) & Cross- Partner Project Lead (2017 – present) |
| 2018 - present | NIEHS Environmental Polymorphisms Registry Advisory Board, DNTP representative |
| 2018 - present | NIEHS-NIDDK Working Group on Chronic Kidney Disease in Agricultural Workers of Unknown Origin |
| 2019 - present | NIEHS DNTP Environmental Cancer Prevention Initiative Health Effect Innovation, Co-Lead |

OTHER POSITIONS AND EMPLOYMENT

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| 2000 - 2002 | Intern, Rheogene, Inc. a Division of the Rohm and Haas Company, Norristown, PA |
| 2002 - 2003 | Research Technician, U.S Military HIV Research Program, The Henry M. Jackson Foundation for the Advancement of Military Medicine, Rockville, MD |
| 2003 - 2004 | Research Technician, Applied Pharmacology Branch, U.S. Army Medical Research Institute of Chemical Defense, Aberdeen Proving Ground Edgewood Area, MD |

PROFESSIONAL DEVELOPMENT

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| 2018 | NIEHS Leadership Development Program (84 classroom hours) |
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GRANT AND CONTRACT SUPPORT

(Completed prior to joining federal service)

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| 2009 - 2012 | Co-I, Revolutionizing preclinical detection of risk factors for idiosyncratic drug-induced liver injury, (NIH) 1RC1DK087510-01 (\$1,000,000) |
| 2009 - 2013 | Co-PI, Pfizer, Inc., Investigation of DILI using the Mouse Model of the Human Population, PI (\$578,938) |
| 2011 - 2013 | Co-PI, AstraZeneca, Development of Biomarkers of Compound X Induced Liver Response in Healthy Human Volunteers and in Mouse Genetic Models (\$299,504) |
| 2011 - 2012 | PI, Sanofi Aventis, Pharmacogenetic Analysis of Compound Y Hepatotoxicity Using the Mouse Model of the Human Population (\$128,750) |
| 2012 - 2013 | PI, Janssen (formerly Johnson & Johnson), miRNA Biomarkers of Drug-Induced Tissue Pathology (\$228,091) |
| 2013 | Co-PI, NeuroTherapeutics Pharma, Injury Biomarkers in a Canine Toxicology Study (\$14,750) |
| 2013 - 2016 | PI / Awardee, Burroughs Wellcome Fund Award for Innovation in Regulatory Science (\$500,000) |
| 2014 - 2016 | PI, U.S. Food and Drug Administration Contract, The Diversity Outbred: A Tool to Improve Preclinical Safety Testing and Pharmacogenomics Analysis (\$1,263,528) |
| 2015 - 2016 | PI, UAMS Center for Biomedical Research Excellence, miRNA Biomarkers of Cisplatin Nephrotoxicity in Genetically Sensitive Subjects, (\$71,293) |
| 2016 | Burroughs Wellcome Fund ad hoc grant for miRNA Biomarkers for Toxicology Workshop, (\$5,000) |

BIBLIOGRAPHY Underline indicates a trainee mentored on indicated paper by AH Harrill

Peer-Reviewed Publications

1. Skelly D.A., Czechanski A., Byers C., Aydin S., Spruce C., Olivier C., Choi K.B., Gatti D.M., Raghupathy N., Stanton A., Vincent M., Dion S., Greenstein I., Pankratz M., Porter D.K., Martin W., Qi W., **Harrill A.H.**, Choi T., Churchill G.A., Munger S.C., Baker C.L., and Reinholdt L.A. Genetic variation influences pluripotent ground state stability in mouse embryonic stem cells through a hierarchy of molecular phenotypes.
2. NTP Research report on in vivo repeat dose biological potency study of triphenyl phosphate in male Sprague Dawley rats (gavage studies). Auerbach, S.S., Behl, M.V., Collins, B.J., Cora, M.C., Fostel, J.M., **Harrill, A.H.**, Shapiro, A.J., Waidyanatha, S. 2018. NTP RR 8. Research Triangle Park, NC: National Toxicology Program (8): 1-37.
3. NTP Research report on baseline characteristics of Diversity Outbred (J:DO) mice relevant to toxicology studies (Research Report 6). **Harrill, A.H.**, Borghoff, S., Zorrilla, L., Blystone, C., Kissling, G.E., Malarkey, D., Shockley, K., Travlos, G., DeVito, M.J. 2018. NTP RR 6. Research Triangle Park, NC: National Toxicology Program (6): 1-27.

4. Mouse population-based evaluation of urinary protein and miRNA biomarker performance associated with cisplatin renal injury. **Harrill, A.H., Lin, H., Tobacyk, J.,** and Seely J.C. *Experimental Biology and Medicine*. 2018 Feb;243(3):237-247.
5. New rodent population models may inform human health risk assessment and identification of genetic susceptibility to environmental exposures. **Harrill, A.H.** and McAllister, K. *Environmental Health Perspectives*. 2017 Aug; 125(8).
6. FutureTox III: Bridges for Translation. Juberg, D.R., Knudsen, T.B., Sander, M., Beck, N.B., Faustman, E.M., Mendrick, D.L., Fowle III, J.R., Hartung, T., Tice, R.R., Lemazurier, E., Becker, R.A., Compton Fitzpatrick, S., Daston, G.P., **Harrill, A.**, Hines, R.N., Keller, D.A., Lipscomb, J.C., Watson, D., Bahadori, T., Crofton, K.M. *Toxicological Sciences*. 2017 Jan;155(1):22-31.
7. A synopsis of the “Influence of epigenetics, genetics, and immunology” session part A at the 35th annual Society of Toxicologic Pathology symposium. **Harrill, A.H.,** Moggs, J.G., Adkins, K.K., Augustin, H.G., Johnson, R.C., Leach, M.W. *Toxicologic Pathology*. 2017 Jan;45(1):114-118.
8. MicroRNA biomarkers of toxicity in biological matrices. **Harrill, A.H.,** McCullough, S.D., Wood, C.E., Kahle, J.J., Chorley, B.N. *Toxicological Sciences*. 2016 Aug;152(2):264-72.
9. Beyond miR-122: Identification of microRNA alterations in blood during a time course of hepatobiliary injury and biliary hyperplasia in rats. Church, R.J., Otieno, M., McDuffie, J.E., Singh, B., Sonee, M., Hall, L, Watkins, P.B., Ellinger-Ziegelbauer, H., **Harrill, A.H.** *Toxicological Sciences*. 2015 Mar;150(1):3-14.
10. Circulating mitochondrial biomarkers for drug induced liver injury. Shi, Q., Yang, X., Mattes, W.B., Mendrick, D.L., **Harrill, A.H.,** Beger, R.D. *Biomarkers in Medicine*. 2015 Nov;9(11):1215-23.
11. Importance of investigating epigenetic alterations for industry and regulators: an appraisal of current efforts by the Health and Environmental Sciences Institute. Miousse, I.R., Currie, R., Datta, K., Ellinger-Ziegelbauer, H., French, J.E., **Harrill, A.H.,** Koturbash, I., Lawton, M., Mann, D., Meehan, R.R., Moggs, J.G., Rasoulpour, R.J., Reijo Pera, R.A., Thompson, K. *Toxicology* 2015 Sep 1;335:11-9.
12. A multi-megabase copy number gain causes maternal transmission ratio distortion on mouse chromosome 2. Didion, J.P., Morgan, A.P., Clayshulte, A.M-F., Yadgary, L., Petkov, P.M., Bell, T.A., Gatti, D.M., Crowley, J.J., Hua, K., Aylor, D.L., Bai, L., Calaway, M., Chesler, E.J., French, J.E., Geiger, T.R., Gooch, T.J., Garland, T., **Harrill, A.H.,** Hunter, K., McMillan, L., Holt, M., Miller, D.R., O’Brien, D.A., Paigen, K., Pan, W., Rowe, L.B., Shaw, G.D., Simecek, P., Sullivan, P.F., Svenson, K.L., Weinstock, G.M., Threadgill, D.W., Pomp, D., Churchill, G.A., de Villena, F.P-M. *PLoS Genetics*. 2015 Feb 13;11(2):e1004850.
13. Sensitivity to hepatotoxicity due to epigallocatechin gallate is affected by genetic background in Diversity Outbred mice. Church, R.J., Gatti, D.M., Urban, T.J., Long, N., Yang, X., Shi, Q., Eaddy, J.S., Mosedale, M., Ballard, S., Churchill, G.A., Navarro, V., Watkins, P.B., Threadgill, D.W., **Harrill, A.H.** *Food and Chemical Toxicology*. 2015 Feb;76:19-26.
14. Dysregulation of protein degradation pathways may mediate the liver injury and phospholipidosis associated with a cationic amphiphilic antibiotic drug. Mosedale, M.,

- Wu, H., Kurtz, C.L., Schmidt, S.P., Adkins, K., **Harrill, A.H.** *Toxicology and Applied Pharmacology*. 2014; Oct 1; 280(1):21-29.
15. A systems biology approach utilizing a mouse diversity panel identifies genetic differences influencing isoniazid-induced microvesicular steatosis. Church, R.J., Wu, H., Mosedale, M., Sumner, S.J., Pathmasiri, W., Kurtz, C.L., Eaddy, J.S., Pandher, K. Singer, M., Batheja, A., Watkins, P.B., Adkins, K., **Harrill, A.H.** *Toxicological Sciences*. 2014; Aug 1; 140(2):281-92.
 16. Benign elevations in serum aminotransferases and biomarkers of hepatotoxicity in healthy volunteers treated with cholestyramine. Singhal, R., **Harrill, A.H.**, Menguy-Vacheron, F., Jayyosi, Z., Benzerdjeb, H., Watkins, P.B. *BMC Pharmacology and Toxicology*. 2014 Aug 3; 15(1):42.
 17. MicroRNA-34c-3p is an early predictive biomarker for doxorubicin-induced glomerular injury progression in male Sprague-Dawley rats. Church, R.J., McDuffie, J.E., Sonee, M., Otieno, M., Ma, J.Y., Liu, X., Watkins, P.B., **Harrill, A.H.** *Toxicology Research*. 2014; 3(5):384-94.
 18. Liver biomarker and in vitro assessment confirm the hepatic origin of aminotransferase elevations lacking histopathological correlate in beagle dogs treated with GABAA receptor antagonist NP260. **Harrill, A.H.**, Eaddy, J.S., Rose, K., Cullen, J.M., Ramanathan, L., Wanaski, S., Collins, S., Ho, Y., Watkins, P.B., Lecluyse, E.L. *Toxicology and Applied Pharmacology*. 2014 Jun 1;277(2):131-7.
 19. Green tea epigallocatechin gallate binds to and inhibits respiratory complexes in swelling but not normal rat hepatic mitochondria. Weng, Z., Zhou, P., Salminen, W.F., Yang, X., **Harrill, A.H.**, Cao, Z., Mattes, W., Mendrick, D.L. *Biochemical and Biophysical Research Communications*. 2014 Jan 17;443(3):1097-104.
 20. Safety biomarkers for drug-induced liver injury - current status and future perspectives. Antoine, D.J., **Harrill, A.H.**, Watkins, P.B., Park, B.K. *Toxicology Research*. 2014; 3:75-85.
 21. Keratin-18 and microRNA-122 complement alanine aminotransferase as novel safety biomarkers for drug-induced liver injury in two human cohorts. Thulin, P., Nordahl, G., Gry, M., Yimer, G., Aklillu, E., Makonnen, E., Aderaye, G., Lindquist, L., Mattsson C.M., Ekblom, B., Antoine, D.J., Park, B.K., Linder, S., **Harrill, A.H.**, Watkins, P.B., Glinghammar, B., Schuppe-Koistinen, I. *Liver International*. 2013 Sep 11.
 22. A mouse diversity panel approach reveals the potential for clinical kidney injury due to DB289 not predicted by classical rodent models. **Harrill, A.H.**, Desmet, K.D., Wolf, K.K., Bridges, A.S., Eaddy, J.S., Kurtz, C.L., Hall, J.E., Paine, M.F., Tidwell, R.R., Watkins, P.B. *Toxicological Sciences*. 2012 Dec;130(2):416-26.
 23. *In vitro* to *in vivo* extrapolation and species response comparisons for drug-induced liver injury (DILI) using DILIsym™: a mechanistic, mathematical model of DILI. Howell, B.A., Yang, Y., Kumar, R., Woodhead, J.L., **Harrill, A.H.**, Clewell, H.J. 3rd, Andersen, M.E., Siler, S.Q., Watkins, P.B. *Journal of Pharmacokinetics and Pharmacodynamics*. 2012 Oct;39(5):527-41.
 24. The effects of heparins on the liver: application of mechanistic serum biomarkers in a randomized study in healthy volunteers. **Harrill, A.H.**, Roach, J., Fier, I., Eaddy, J.S., Kurtz, C.L., Antoine, D.J., Spencer, D.M., Kishimoto, T.K., Pisetsky, D.S., Park, B.K., Watkins, P.B. *Clinical Pharmacology and Therapeutics*. 2012 Aug;92(2):214-20.

25. An analysis of N-acetylcysteine treatment for acetaminophen overdose using a systems model of drug-induced liver injury. Woodhead, J.L., Howell, B.A., Yang, Y., **Harrill, A.H.**, Clewell, H.J. 3rd, Andersen, M.E., Siler, S.Q., Watkins, P.B. *Journal of Pharmacology and Experimental Therapeutics*. 2012 Aug;342(2):529-40.
26. Replication and narrowing of gene expression quantitative trait loci using inbred mice. Gatti, DM, **Harrill, A.H.**, Wright, F.A., Threadgill, D.W., Rusyn, I. *Mammalian Genome*. 2009 Jul;20(7):437-46.
27. Mouse population-guided resequencing reveals that variants in CD44 contribute to acetaminophen-induced liver injury in humans. **Harrill, A.H.**, Watkins, P.B., Su, S., Ross, P.K., Harbourt, D.E., Stylianou, I.M., Boorman, G.A., Russo, M.W., Sackler, R.S., Harris, S.C., Smith, P.C., Tennant, R., Bogue, M.A., Paigen, K., Harris, C., Contractor, T., Wiltshire, T., Rusyn, I., and Threadgill, D.W. *Genome Research*. 2009 Sep;19(9):1507-15.
28. Population-Based Discovery of Toxicogenomics Biomarkers for Hepatotoxicity Using a Laboratory Strain Diversity Panel. **Harrill, A.H.**, Ross, P.K., Gatti, D.M., Threadgill, D.W., and Rusyn, I. *Toxicological Sciences*. 2009 Jul;110(1):235-43.
29. Systems biology and functional genomics approaches for the identification of cellular responses to drug toxicity. **Harrill, A.H.**, Rusyn, I.R. *Expert Opinion on Drug Metabolism and Toxicology*. 2008 Nov;4(11):1379-89.
30. Microarray analysis of mouse ear tissue exposed to bis-(2-chloroethyl) sulfide: gene expression profiles correlate with treatment efficacy and an established clinical endpoint. Dillman III, J.F., **Hege, A.I.**, Orzolek, L.D., Phillips, C.S., Sylvester, A.J., Bossone, C., Henemyre-Harris, C., Kiser, R.C., Choi, Y.W., Schlager, J.J., and Sabourin, C.L. *Journal of Pharmacology and Experimental Therapeutics*. 2006 Apr;317(1):76-87.
31. Genomic analysis of murine pulmonary tissue following carbonyl chloride inhalation. Sciuto, A.M., Phillips, C.S., Orzolek, L.D., **Hege, A.I.**, Moran, T.S., and Dillman III, J.F. *Chemical Research in Toxicology*. 2005 Nov;18(11):1654-60.
32. Genomic Analysis of Rodent Pulmonary Tissue Following Bis-(2-Chloroethyl) Sulfide Exposure. Dillman, J.F. III, Phillips, C.S., Dorsch, L.M., Croxton, M.D., **Hege, A.I.**, Sylvester, A.J., Moran, T.S., and Sciuto, A.M. *Chemical Research in Toxicology*. 2005 Jan;18(1):28-34.

In Review / In Revision

1. A cross-sector call to improve carcinogenicity risk assessment through genomic technologies. Yauk, C.L., **Harrill, A.H. (*corresponding)**, Ellinger-Ziegelbauer, H., van der Laan, J-W., Moggs, J. Froetschl, R., Sistare, F., Pettit, S. (Submitted; Minor Revision).
2. RATEmiRs: The rat atlas of tissue-specific and enriched miRNAs for discerning baseline exclusivity of candidate biomarkers. (Submitted).
3. Nitrosative stress and adipokine homeostasis as a mechanism for zileuton hepatotoxicity and resistance in genetically sensitive mice. You, D. Lyn-cook, L.E., Mayeux, P.R., James, L.P., Gatti, D.M., Mattes, W.B., **Harrill, A.H.** (Submitted).

Book Chapters (Peer Reviewed)

1. Hepatic toxicology: Detection of hepatotoxicity in humans and experimental settings. **Harrill, A.H.** Comprehensive Toxicology. Editors: James Luyendyk, Robert Roth, Charlene McQueen. Elsevier. 2017.
2. Mouse population based toxicology for personalized medicine. **Harrill, A.H.** Drug Discovery Toxicology: From Target to Translational Biomarkers. John Wiley & Sons. Editors: Yvonne Will, James Eric McDuffie, Andrew J. Olaharski, and Brandon D. Jeffy. John Wiley & Sons. 2016.

Other Published Articles / Media

1. Member highlight: Interviews with Dr. Curtis D. Klaassen and his past trainees, Drs. Nathan Charrington and Lauren Aleksunes. By Qin Chen and **Alison Harrill**. *The Pharmacologist*. Vol 60(1):73-74. March 2018.
2. Member spotlight: Interview with Dr. Xiaochao Ma. By **Alison Harrill** and Lauren Aleksunes. *The Pharmacologist*. Vol 58(1):62. March 2016.
3. Letter to the Editor: Getting help to Ebola's victims. By **Alison Harrill**. *The New York Times*. September 17, 2014.

BIBLIOGRAPHY – Conference Proceedings/Abstracts

Invited Oral Presentations

1. Introduction to predictive models for liver and kidney toxicity. Gordon Research Conference on Drug Metabolism. July, 2019.
2. Protecting all of us: Quantifying chemical risks in genetically sensitive subpopulations. North Carolina State University Toxicology Department Seminar Series. March, 2019.
3. Quantifying inter-individual toxicodynamic variability using genetic reference populations to inform risk assessment. Annual Meeting of the Society of Toxicology. Baltimore, MD. March, 2019.
4. Diversity Outbred mice: a model for human population diversity in responses. NIAID workshop on caveats of the mouse model: parameters that affect immunology research for vector-borne pathogens. Rockville, MD. August, 2018.
5. Data driven-estimation of variability and uncertainty in toxicity using Diversity Outbred mice. Mutant mouse resource and research centers supported by NIH annual meeting. Rockville, MD. August, 2018.
6. Genetics and Toxicology: an integrated story. Keynote. University of North Carolina at Chapel Hill. Annual retreat of the Curriculum in Toxicology. Chapel Hill, NC. June, 2018.
7. Toxicogenomics paradigms for setting sensitive dose response thresholds using population-based models. Health Canada (invited seminar). Ottawa, Canada. February, 2018.
8. Mouse populations as a tool for precision medicine. National Academy of Sciences workshop on Advancing Disease Modeling in Animal-Based Research in Support of Precision Medicine. Washington DC. October, 2017.

9. Population dynamics in toxicity responses: Diversity Outbred mice at NTP. University of North Carolina at Chapel Hill Center for Drug Safety Sciences (invited seminar). Research Triangle Park, NC. August, 2017.
10. Genetically heterogeneous mouse populations enable study of idiosyncratic hepatotoxicity. Predicting Drug Safety – World Pharma Congress. Boston, MA. June, 2017.
11. miRNAs in biofluids: a new tool to aid in histopathological interpretation. US EPA/NHEERL Epigenetics Faculty Seminar Series. Research Triangle Park, NC. February, 2017.
12. Population-based toxicogenomics: identifying mechanisms of susceptibility. National Toxicology Program. Durham, NC. July, 2016.
13. Low frequency clinical adverse drug reactions can be predicted and studied by using genetically diverse mouse populations. Society of Toxicology Pathology Annual Meeting. San Diego, CA. June, 2016.
14. Exploiting genetic variation in animal models to protect at-risk subpopulations from chemical hazards. The University of California at Davis Department of Environmental Engineering (invited lecture). Davis, CA. April, 2016.
15. Pharmacology and toxicology of herbal medicines in veterinary practice. Texas A&M University (invited lecture). College Station, TX. February, 2016.
16. Translational pharmacogenomics: using mice to predict human drug safety risks. Texas A&M University. Interdisciplinary Faculty of Toxicology seminar series. College Station, TX. November, 2015.
17. Toxicity prediction and development of pharmacogenetic co-diagnostics using Diversity Outbred mice. New Jersey Drug Metabolism Discussion Group. Somerset, NJ. October, 2015.
18. Mouse population models: a promising strategy for personalized medicine, Environmental and Occupational Sciences Institute seminar series, Rutgers University. Piscataway, NJ. October, 2015.
19. Mouse population models and systems toxicology improve translation of chemical safety risks to humans. Department of Environmental Science and Engineering, the University of North Carolina at Chapel Hill. Chapel Hill, NC. August, 2015.
20. Mouse populations enable translational pharmacogenomic approaches for understanding and predicting adverse drug events. Rodent Populations for Environmental Risk Assessment. National Institute for Environmental Health Sciences. Research Triangle Park, NC. March, 2015.
21. Translational approaches to using genetically diverse mouse populations to understand and predict drug toxicity in humans. Annual Meeting of the Society for Toxicologic Pathology. Washington, DC. June, 2014.
22. Genetically diverse mouse populations facilitate toxicogenetic analysis of drug-induced hepatotoxicity (invited seminar). United States Army Medical Research Institute for Chemical Defense. Aberdeen, MD. June, 2014.
23. Predicting drug-induced liver injury: qualification of biomarkers and preclinical models (invited seminar). Arkansas Children's Hospital. Little Rock, AR. June, 2014.
24. Translational approaches to using genetically diverse mouse population models to understand and predict drug toxicity in humans. American Association of Pharmaceutical Scientists Annual Meeting. San Antonio, TX. November, 2013.

25. Translational pharmacogenetic analysis and safety assessment using mouse population based models (invited seminar). The Jackson Laboratory. Bar Harbor, ME. October, 2013.
26. Translational pharmacogenomics using mouse populations: a potential tool for safety assessment and patient stratification (invited seminar). U.S. Food and Drug Administration, National Center for Toxicological Research. Jefferson, AR. September, 2013.
27. Translational pharmacogenetic analysis and safety assessment using mouse population based models. Applied Pharmaceutical Analysis Meeting and the Boston Society. Boston, MA. September, 2013.
28. Translational pharmacogenetic analysis and safety assessment using mouse population based models. St. Jude Children's Research Hospital and University of Tennessee Health Center. Memphis, TN. September, 2013.
29. The use of population based mouse models in toxicology. "Study III- Genetically Diverse Mouse Models Improve Prediction of Clinical Toxicity Risk." The Toxicology Forum. Aspen, CO. July, 2013.
30. Use of genetically diverse mouse models in pharmaceutical development. One day workshop. ILSI/HESI Committee for the Application of Genomics to Risk Assessment. Washington, DC. November, 2012.
31. Translational pharmacogenetics: improving toxicity risk prediction by using genetically defined rodents. Animal Clinical Chemistry Division Fall Meeting on "Hepatotoxicity: Mechanisms, Predictivity, and Biomarkers." Raritan, NJ. October, 2011.
32. Qualification of novel liver biomarkers in a healthy volunteer study of heparin treatment. AASLD/FDA/PhRMA Annual Drug-Induced Liver Injury Meeting. Silver Spring, MD. March, 2011.
33. Development of new in vivo models. American College of Toxicology Annual Meeting. Baltimore, MD. November, 2010.
34. Predicting and understanding adverse drug reactions from mouse to man using novel genetic and *in silico* tools. North Carolina Society of Toxicology Spring Meeting. Research Triangle Park, NC. March, 2010.
35. Drug-induced liver injury: predicting risk from mouse to man using novel genetic and *in silico* tools. University of North Carolina Department of Pharmacotherapy and Experimental Therapeutics Seminar Series. Chapel Hill, NC. November, 2009.
36. Pharmacogenetics of drug-induced liver injury using the mouse model of the human population. International Society for the Study of Xenobiotics. Baltimore, MD. October, 2009.

Abstracts / Oral Presentations

1. Diversity Outbred mice – a genetic reference population enabling risk predictions for sensitive subpopulations. Experimental Biology. San Diego, CA. April, 2018.
2. Refined applications of toxicogenomics in safety assessment. The Toxicology Forum Summer Meeting. Salt Lake City, UT. July, 2016.
3. Diversity Outbred mice are a tool to predict and prevent rare adverse drug events. Annual Meeting of the Complex Trait Community. Portland, OR. June, 2015.
4. Session Chair. Introduction: Current understanding of immune-mediated adverse drug reactions. Annual Meeting of the Society of Toxicology. San Diego, CA. March, 2015.

5. Idiosyncratic drug-induced liver injury potential of zileuton is detected in Diversity Outbred mice. Annual Meeting of the American Society for Pharmacology and Experimental Therapeutics. Boston, MA. March, 2015.
6. Session Chair and Speaker, Novel biomarkers provide insight into benign drug-induced ALT elevations in the clinic. Annual Meeting of the Society of Toxicology. Phoenix, AZ. March, 2014.
7. Genetically diverse mouse populations facilitate toxicogenetic analysis of drug-induced hepatotoxicity. Annual Meeting of the Society of Toxicology. Phoenix, AZ. March, 2014.
8. Translational aspects of liver toxicity biomarkers. American College of Toxicology Annual Meeting. Phoenix, AZ. November, 2011.
9. Globalization Pharmaceuticals Education Network short course entitled "Drug-induced toxicity: a major factor in clinical failure of drug candidates". Chapel Hill, NC. November, 2010.
10. Collaborative Cross inbred mice as a model for idiosyncratic adverse drug events. Gordon Research Conference on Drug Metabolism. Waterville, ME. July, 2010.
11. Translational pharmacogenomics of DILI using the Collaborative Cross mouse population. Drug-Induced Liver Injury Network Annual Meeting. Research Triangle Park, NC. April, 2010.

Abstracts / Poster Presentations (Underline indicates trainee mentored by AH Harrill)

1. Evaluating the Diversity Outbred mice as a model for human obesity and metabolic alterations associated with high fat diet using a machine learning approach. Huang, M.C., Li, Y., Jackson-Humbles, D., Shockley, K., Li, L., DeVito, M., **Harrill, A.H.** Interdisciplinary Nutrition Sciences Symposium. Chapel Hill, NC. 2019.
2. Optimization of tissue and RNA preparation to facilitate RNA-seq analysis of metabolic syndrome biomarkers in a Diversity Outbred mouse population. Bell, N. You, D., Huang, M., Elgart, B., Clausen, N., Weick, M., Reeves, N., Foley, J., Gerrish, K. Solomon, G., DeVito, M., **Harrill, A.H.** NIEHS Summer Intern Presentation Day. RTP, NC. 2019.
3. Leveraging the National Toxicology Program's experience to provide insight into the etiology of chronic kidney disease of unknown origin in agricultural workers in Central America and Asia. Elmore, S.A., Birnbaum, L.S., Brockenfelt, K., Gruebbel, M.M., **Harrill, A.H.**, Joubert, B.R., Seely, J., Berridge, B.R. Third International Workshop on Chronic Kidney Diseases of Uncertain/Non-Traditional Etiology in Mesoamerica and Other Regions. San Jose, Costa Rica. 2019.
4. RNA-seq analysis of transcriptional changes associated with susceptibility to zileuton-induced liver injury. Bell, N., Lyn-cook Jr, L., Luo, S., **Harrill, A.H.** NIEHS Science Day. RTP, NC. 2018.
5. Mouse population models enable clinically relevant evaluation of kidney injury biomarker performance. **Harrill, A.H.**, Tobacyk, J., Lin, H., Seely, J.C. NIEHS/NIDDK Workshop on Chronic Kidney Disease in Agricultural Communities. Bethesda, MD. 2018.
6. Population variability in neurotoxicity outcomes modeled in vitro with Diversity Outbred neural progenitor cells. **Harrill, A.**, Behl, M., Choi, T., Page, L., Everett, L., Balik-Meisner, M., Porter, D., Witt, K., Paules, R. Annual Meeting of the Society of Toxicology. San Antonio, TX. 2018.

7. Mouse population models enable clinically relevant evaluation of kidney injury biomarker performance. Tobacyk, J., Lin, H., Seely, J.C., Harrill, A.H. Annual Meeting of the Society of Toxicology. San Antonio, TX. 2018.
8. Identification of pharmacogenetic risk factors for zileuton-induced liver injury using diversity outbred mice. **Harrill, A.H.,** Gatti, D.M., Luo, S., Lyn-cook Jr., L.E., Churchill, G.A. Experimental Biology. Chicago, IL. 2017.
9. Urinary kidney toxicity biomarker performance in an outbred mouse population exposed to cisplatin. Lin, H., Tobacyk, J., Luo, S., Harrill, A.H. Annual Meeting of the Society of Toxicology. Baltimore, MD. 2017.
10. Transient drug-induced hyperbilirubinemia observed in Diversity Outbred mice. **Harrill, A.H.,** Luo, S., Boyle, M., Everds, N., Brooks, B., Volak, L., Lin, H., Lyn-cook, L., Tobacyk, J., Morgan, R. Annual Meeting of the Society of Toxicology. Baltimore, MD. 2017.
11. Valproic acid-induced nephrotoxicity in Diversity Outbred mice. Lin, H., Luo, S., Tobacyk, J., Lyn-cook Jr., L., Harrill, A.H. Gordon Research Conference on Drug Safety. Easton, MA. 2016.
12. Population variability in cisplatin-induced kidney injury outcomes are modeled using Diversity Outbred mice. Tobacyk, J., Lin, H., Luo, S., Harrill, A.H. Gordon Research Conference on Drug Safety. Easton, MA. 2016.
13. MicroRNA profiling identifies potential biomarkers of hepatobiliary injury following exposure to several toxicants in the rat. Church, R.J., Pavkovic, M., Otieno, M., Ellinger-Ziegelbauer, H., McDuffie, J.E., Singh, B., Sonee, M., Hall, L., Watkins, P.B., **Harrill, A.H.** Annual Meeting of the Society of Toxicology. New Orleans, LA. 2016.
14. Exploiting the diversity Outbred mouse model to identify a sensitive preclinical model and underlying mechanism of MK-0536 induced liver injury. Pearson, K., Johnson, T., Gonzalez, R., LaFranco-Scheuch, L., Amin, R., Glaab, W., Sistare, F., **Harrill, A.** Annual Meeting of the Society of Toxicology. New Orleans, LA. 2016.
15. The role of genetic background on adverse health effects due to prenatal exposure to environmental obesogen tributyltin. Tobacyk, J., La Merrill, M., Luo, S., **Harrill, A.** Annual Meeting of the Society of Toxicology. New Orleans, LA. 2016.
16. Genetic background plays a role in risk of zileuton-induced liver injury in Diversity Outbred mice. Lyn-Cook Jr., L., Gatti, D., Luo, S., Churchill, G., **Harrill, A.** Annual Meeting of the Society of Toxicology. New Orleans, LA. 2016.
17. Diversity Outbred mice indicate idiosyncratic drug-induced liver injury potential. Lyn-Cook Jr., L., Gatti, D.M., Luo, S., Churchill, G.A., **Harrill, A.H.** International Mammalian Genome Society. Yokohama, Japan. 2015
18. Diversity Outbred mice are a tool for predicting idiosyncratic liver toxicity. **Harrill, A.H., Lyn-Cook Jr., L.** Gatti, D.M., Luo, S., Churchill, G.A. Gordon Research Conference: Cellular & Molecular Mechanisms of Toxicity. Andover, NH. 2015
19. The role of genetic background on adverse health effects due to prenatal exposure to environmental obesogen tributyltin. Tobacyk, J., Luo, S., Harrill, A.H. Gordon Research Conference: Cellular & Molecular Mechanisms of Toxicity. Andover, NH. 2015
20. The Diversity Outbred: A tool to improve preclinical safety testing and pharmacogenetic analysis. **Harrill, A.H., Lyn-Cook Jr.,** Gatti, D.M., Luo, S., Churchill, G.A. U.S. Food and Drug Administration Office of Regulatory Science Innovation Symposium. White Oak, MD. 2015.

21. Idiosyncratic drug-induced liver injury potential of zileuton is detected in Diversity Outbred mice. **Harrill, A.H., Lyn-Cook Jr.,** Gatti, D.M., Luo, S., Churchill, G.A. Annual Meeting of the American Society for Pharmacology and Experimental Therapeutics. Boston, MA, 2015.
22. Diversity Outbred mice indicate idiosyncratic drug-induced liver injury potential. **Lyn-Cook Jr.,** Gatti, D.M., Luo, S., Churchill, G.A., **Harrill, A.H.** Annual Meeting of the Society of Toxicology. San Diego, CA. 2015.
23. Time-dependent release and expression of microRNAs occurs following α -naphthylisothiocyanate exposure in the rat. **Church, R.J.,** Otieno, M., McDuffie, J.E., Sonee, M., Hall, L., Singer, M., Watkins, P.B., **Harrill, A.H.** Annual Meeting of the Society of Toxicology. San Diego, CA. 2015.
24. Using targeted metabolomics to predict drug hepatotoxicity in Diversity Outbred mice. Chandramouli, B., Cosgrove, J.R., **Lyn-Cook Jr.,** L, Benskin, J.P., **Harrill, A.H.** Annual Meeting of the Society of Toxicology. San Diego, CA. 2015.
25. Diversity Outbred mice indicate idiosyncratic drug-induced liver injury potential. **Lyn-Cook Jr.,** Gatti, D.M., Luo, S., Churchill, G.A., **Harrill, A.H.** National Institute for Environmental Health Sciences. Research Triangle Park, NC. March, 2015.
26. Characterizing candidate genes in non-small cell lung cancer. **Ngongoni, S., Harrill, A.H.,** Orloff, M. University of Arkansas for Medical Sciences Research Day. Little Rock, AR. 2014.
27. Diversity Outbred mice may facilitate prediction of drug-induced liver injury. **Harrill, A.H.** Gordon Research Conference: Drug Safety. Easton, MA. 2014.
28. Doxorubicin-induced glomerular injury is associated with urinary microRNA alterations in the rat. **Church, R.J.,** McDuffie, J.E., Sonee, M., Otieno, M., Watkins, P.B., **Harrill, A.H.** Annual Meeting of the Society of Toxicology. Phoenix, AZ. 2014.
29. Prdm2 is identified as a potential risk factor for zileuton-induced liver injury in a mouse genetic diversity panel. **Mosedale, M.,** Adkins, K., Wu, H., **Harrill, A.H.** Annual Meeting of the Society of Toxicology. Phoenix, AZ. 2014.
30. Advancing regulatory science through translational pharmacogenomics. **Harrill, A.H.** Burroughs Wellcome Fund Awardee Meeting. Research Triangle Park, NC. 2013.
31. Safety assessment of a novel antibiotic using a mouse population-based approach predicts risk of DILI in humans where classical models fail. **Mosedale, M., Kurtz, C.L.,** Eaddy, J.S., Adkins, K., Wu, H., Watkins, P.B., **Harrill, A.H.** Annual Meeting of the Society of Toxicology. San Antonio, TX. 2013.
32. Identification of genomic regions linked to epigallocatechin gallate induced liver toxicity using the Diversity Outbred stock. **Church, R.J.,** Gatti, D.M., **Mosedale, M.,** Eaddy, J.S., Churchill, G.A., Watkins, P.B., Threadgill, D.W., **Harrill, A.H.** Annual Meeting of the Society of Toxicology. San Antonio, TX. 2013.
33. Population based toxicity assessment implicates mitochondrial dysfunction as an early event in isoniazid-induced liver injury. Eaddy, J.S., **Kurtz, C.L.,** Adkins, K., Wu, H., Watkins, P.B., **Harrill, A.H.** Annual Meeting of the Society of Toxicology. San Francisco, CA. 2012.
34. Pharmacogenomics of Thelin induced liver injury in a mouse diversity panel. **Kurtz, C.L.,** Adkins, K., Wu, H., Rago, B., Barricklow, J., Pandher, K., **Harrill, A.H.** Annual Meeting of the Society of Toxicology. San Francisco, CA. 2012.

35. A mouse diversity panel approach predicts clinical DB289-related renal toxicity. **Harrill, A.H.**, DeSmet, K., Wolf, K., Hall, J.E., Paine, M., Tidwell, R., Watkins, P.B. Annual Meeting of the Society of Toxicology. San Francisco, CA. 2012.
36. Idiosyncratic adverse drug reactions modeled using a genetically diverse mouse panel may facilitate pharmacogenomics. **Harrill, A.H.**, Adkins, K., Wu, H., Pletcher, M.T., Watkins, P.B. Mouse Genetics. Washington, DC. 2011.
37. Sorbitol dehydrogenase and glutamate dehydrogenase are not superior to traditional biomarkers of liver injury: a healthy volunteer study of heparins. **Harrill, A.H.**, Eaddy, J.S., Roach, J., Fier, I.D., Watkins, P.B. Annual Meeting of the Society of Toxicology. Washington, DC. 2011.
38. The Collaborative Cross: a systems biology resource for understanding and predicting adverse drug reactions”, **Harrill, A.H.**, Threadgill, D.W., and Watkins, P.B. Quantitative and Systems Pharmacology Workshop II. Bethesda, MD. 2010.
39. Idiosyncratic adverse drug reactions modeled using a mouse diversity panel may facilitate pharmacogenomics. **Harrill, A.H.**, Pletcher, M.T., Lawton, M., Watkins, P.B. Annual Meeting of the Society of Toxicology. Salt Lake City, UT. 2010.
40. Data- and simulation-drive systems for predictive toxicology. Siler, S., **Harrill, A.**, Kadami, A., Roter, A.H. American College of Toxicology 30th Annual Meeting. Palm Springs, CA. 2009.
41. Biosimulation of drug induced liver injury. Clewell, H., **Harrill, A.**, Siler, S., Ho, R., Kadambi, A. American Chemical Society Division of Chemical Toxicology. Washington, DC. 2009.
42. Phenotypic anchoring of gene expression from acetaminophen hepatotoxicity studies in the mouse model of the human population reveals biomarkers of response. **Hege, A.I.**, Ross, P.K., Watkins, P.B., Threadgill, D.W., and Rusyn, I. Annual Meeting of the Society of Toxicology. Seattle, WA. 2008.
43. Toxicogenetics, using a mouse diversity panel, reveals population-based biomarkers of response to acetaminophen hepatotoxicity. **Hege, A.I.**, Threadgill, D.W., and Rusyn, I. UNC Curriculum in Toxicology Annual Retreat. Chapel Hill, NC. 2008.
44. Cross-species association mapping identifies genetic risk factors for liver toxicity. **Hege, A.I.**, Russo, M.W., Su, S., Ross, P.K., Stylianou, I.M., Boorman, G.A., Tennant, R., Bogue, M.A., Paigen, K., Wiltshire, T., Watkins, P.B., Threadgill, D.W., and Rusyn, I. Annual Meeting of the Society of Toxicology. Charlotte, NC. 2007.
45. Time and dose dependent factors in genetic susceptibility to acetaminophen hepatotoxicity. **Hege, A.I.**, Ross, P.K., Balletta, L.D., Bradford, B.U., Tennant, R., Stylianou, I.M., Bogue, M.A., Paigen, K., Threadgill, D.W., and Rusyn, I. Annual Meeting of the Society of Toxicology. San Diego, CA. 2006.
46. Toxicogenetic analysis of susceptibility to acetaminophen-induced liver injury. **Hege, A.I.**, Ross, P.K., Balletta, L.D., Bradford, B.U., Tennant, R., Stylianou, I.M., Bogue, M.A., Paigen, K., Threadgill, D.W., and Rusyn, I. Toxicogenomics Research Consortium Annual Meeting. Portland, OR. 2005.
47. Toxicogenetic analysis of susceptibility to acetaminophen-induced liver injury. **Hege, A.I.**, Lodestro, C., Lee, D., Balletta, L.D., Bradford, B.U., Maki, A., Tennant, R., Bogue, M.A., Paigen, K., Threadgill, D.W., and Rusyn, I. Annual Meeting of the Society of Toxicology. New Orleans, LA. 2005.

48. Toxicogenetic analysis of susceptibility to acetaminophen-induced liver injury. **Hege, A.I.**, Lodestro, C., Lee, D., Balletta, L.D., Bradford, B.U., Maki, A., Tennant, R., Bogue, M.A., Paigen, K., Threadgill, D.W., and Rusyn, I. Toxicogenomics Research Consortium Annual Meeting. 2004.

INTRAMURAL INVITED SCIENTIFIC PRESENTATIONS (NIEHS)

1. NTP Forum. August, 2018.
2. Immunity, Inflammation and Disease Laboratory Special Seminar Series. July, 2017.
3. BSB / NICEATM Joint Meeting Seminar Series. March, 2017.
4. NTP Project Development Forum. March, 2017.

TEACHING

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| 2012 - 2013 | Science and Methods in Drug Development – Graduate Course Lecturer. Course Directors: Bob Dupuis and Melanie Joy, University of North Carolina at Chapel Hill Eshelman School of Pharmacy |
| 2012 - 2013 | Pharmacogenomics - Undergraduate Course Lecturer. Course Director: Thomas Urban, Duke University |
| 2014 - 2016 | Systems Therapeutics - Graduate Course Lecturer. Course Director: Philip Mayeux, University of Arkansas for Medical Sciences, Department of Pharmacology and Toxicology |
| 2015 - 2016 | Molecular Epidemiology – Graduate Course Lecturer. Course Directors: Mohammad Orloff and Robert Delongchamp, University of Arkansas for Medical Sciences, College of Public Health |
| 2015 - 2016 | Principles of Pharmacology and Toxicology - Graduate Course Lecturer. Course Director: William Fantegrossi, University of Arkansas for Medical Sciences, Department of Pharmacology and Toxicology |
| 2015 - 2016 | Experimental Pharmacology and Toxicology - Graduate Course Lecturer. Course Director: Eric Peterson, University of Arkansas for Medical Sciences, Department of Pharmacology and Toxicology |
| 2016 | Environmental and Occupational Health – Graduate Course Instructor. Course Director: Rosalind Penney, University of Arkansas for Medical Sciences, College of Public Health |

TRAINEES

Doctoral Students / Primary Doctoral Advisor and Committee Chair

Lascalles Lyn-cook Jr., Ph.D. Candidate, Interdisciplinary Biomedical Sciences,
UAMS 2013-Current

Julia Tobacyk, Ph.D. Candidate, Pharmacology & Toxicology, UAMS 2015-2016

Doctoral Student Rotation Mentor

Ryan Macleod, M.D. Ph.D. Candidate, UAMS Summer 2014 Rotation

Chuck Hayes, Ph.D. Candidate, Pharmacology & Toxicology, UAMS Spring 2014
Rotation

Postdoctoral Fellowship Mentor (current position)

Dahea You, Pharm.D., Ph.D. 2018 - current

Madelyn Huang, Ph.D. 2018 – current ; primary mentor: Dori Germolec

Haixia Lin, Ph.D., 2015 – 2017 (research assistant, UAMS)

Rachel Church, Ph.D., 2011-2013 (research assistant professor, UNC-Chapel Hill)

Merrie Mosedale, Ph.D., 2011-2013 (research assistant professor, UNC-Chapel Hill)

Rohit Singhal, Ph.D., Sanofi fellow, 2012 (project manager at EMD Serono Inc)

Catherine Lisa Kurtz, Ph.D. 2009-2011 (research specialist, UNC-Chapel Hill)

Undergraduate Students

Natalie Bell, East Carolina University, Summer 2018 and Summer 2019

Shamiso Ngongoni, Southern Arkansas University, Summer 2014

Laura Abbott, U. Arkansas at Fayetteville, Summer 2014

Jessica Brown, North Carolina State University, Summer 2011

Maria Davis, North Carolina State University, Summer 2011

Veronica Adams, North Carolina State University, Summer 2010

MEDIA and PRESS

May, 2018. *National Academies Press*. Advancing disease modeling in animal-based research in support of precision medicine: proceedings of a workshop.

<http://nap.edu/25002>

March 12, 2018. *Society of Toxicology Communicate Science News*. SOT CCT workshop on toxicological concerns in older adults provided forum to address an important growing public health issue.

<http://toxchange.toxicology.org/p/bl/et/blogaid=2567>

January 26, 2018. *Environmental Health Perspectives Science Selection*. Capturing genetic diversity: the power of the CC and DO mouse models.

<https://ehp.niehs.nih.gov/ehp2385/>

October 20, 2017. *National Academy of Sciences ILAR Roundtable*. Alison Harrill: Using Diversity Outbred mice to mimic human population dynamics.

<https://www.youtube.com/watch?v=1-X0bjJdIFg>

March 23, 2016. *Toxicological Sciences*. Society of Toxicology Board of Publications best paper award for 2016.

<https://academic.oup.com/toxsci/article/150/2/259/2461991>

March, 2016. *National Academies Press*. Interindividual variability - new ways to study and implications for decision making: workshop in brief.

<https://www.nap.edu/catalog/23413/interindividual-variability-new-ways-to-study-and-implications-for-decision>

February 24, 2016. *Science Daily*. New research challenges Darwin, shows how a gene cheats Mendel's law of segregation.

<https://www.sciencedaily.com/releases/2016/02/160224133715.htm>

December 15, 2015. *UAMS Health Online*. UAMS researcher honored by Society of Toxicology. <https://uamshealth.com/news/2015/12/15/uams-researcher-honored-by-society-of-toxicology/>

December 14, 2015. *Society of Toxicology Newsroom*. Toxicologists who are helping improve public health honored with 2016 SOT awards.

<https://newswise.com/articles/toxicologists-who-are-helping-improve-public-health-honored-with-2016-sot-awards>

April 21, 2015. *Arkansas Online*. UAMS researcher aids in study of 'selfish gene.'

<http://www.arkansasonline.com/news/2015/apr/21/uams-researcher-aids-study-selfish-gene/?print>

April, 2015. *NIEHS Environmental Factor*. Variety of rodent models explored in NIEHS symposium.

<https://factor.niehs.nih.gov/2015/4/science-rodent/index.htm>

November 4, 2014. *Association of Schools and Programs of Public Health*. Arkansas faculty awarded \$1.26 million contract from FDA.

<https://www.aspph.org/arkansas-faculty-awarded-1-26-million-contract-from-fda/>

October 4, 2013. *University of Arkansas for Medical Sciences News*. Public health researcher receives prestigious award.

<https://uamshealth.com/news/2013/10/04/public-health-researcher-receives-prestigious-award/>

February 24, 2012. *Science/AAAS*. A new era for clinical models.

http://www.sciencemag.org/site/products/1st_20120224.pdf

January 7, 2011. *Triangle Business Journal*. As science and fiction diverged, she chose genetics.

<https://www.bizjournals.com/triangle/print-edition/2011/01/07/as-science-and-fiction-diverged-she.html>

May 22, 2009. *Science: Editor's Choice*. Expedited pharmacogenomics.

<http://science.sciencemag.org/content/324/5930/twil>